

NETWORK BASED DIAGNOSTIC SYSTEM AND METHOD  
FOR PROGRAMMABLE HARDWARE

ABSTRACT

A system and method for diagnosing an electronic device remotely using a network is provided. The electronic device includes one or more programmable logic devices that are configurable. A diagnostic microcontroller functions to communicate to the programmable logic devices and to communicate to the network. To diagnose the electronic device, communication is established to the network and to a diagnostic/repair center. The diagnostic/repair center selects diagnostic commands and transmits them to the electronic device. The diagnostic microcontroller initiates the diagnostic commands on the one or more programmable logic devices to test their configuration and/or functionality. Test results are collected and transmitted back to the diagnostic/repair center for analysis. Based on the analysis, if appropriate, reconfiguration commands are sent to reconfigure the programmable logic device to correct identified errors.